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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,937	09/22/2003	Masayuki Ueyama	44319-070	5111

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EXAMINER	
SENFI, BEHROOZ M	
ART UNIT	PAPER NUMBER
2621	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/664,937	UEYAMA, MASAYUKI	
	Examiner	Art Unit	
	Behrooz Senfi	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/22/04,09/22/05,12/08/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16 – 18 are rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter as described below.

Claim 16 is directed to a program product to be read by a computer of a device for controlling an imaging device. Such program product as defined in the specification (0019) comprises instruction/software of taking a picture, which does not result to a practical application and is non-statutory. Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (Official Gazette Notice of 22 November 2005).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 4, 8 – 10, 16 – 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by lyons (US 6,734,911).

Regarding claims 1 and 16, Lyons '911 discloses, an imaging device comprising

a wide angle high distortion optical system (i.e. fig. 1a, camera 17) having an optical characteristic that an image of an object is projected in large magnification in the central area of the image than in a peripheral area (i.e. fig. 2A, object 21 at the center of the image) and that distortion is larger in the peripheral area than in a central area of the image formed by the optical system (i.e. fig. 2A, col. 7, lines 1 – 18) and an image capturing section for capturing the image data formed by the optical system in a stand-by mode for waiting for intrusion of an object, and in a close-observation mode for taking a picture of the object while tracking the object; and an image data generating section for generating, in the close-observation mode, a central image data representing an image of the central area of the image projected on the image capturing section by the optical system (i.e. fig. 1A, col. 3, lines 3 – 13 and col. 7, lines 55 – 65, wherein the optical system of Lyons tracks and re-aim the camera to find the object) and in claim 16, for additional limitation, a program product (which is defined in spec. as computer instruction) for controlling the imaging device, reads on computer image processing 222 and tracking system 15, which the computer instruction/software is necessitated by the computer image processing 222 and tracking system 15 to process image and control of the imaging device.

. Regarding claims 2 – 3 and 17, Lyons '911 discloses, in the stand-by mode, the image data generating section extracts the central image data and an image data representing at least a part of the image in the peripheral area such that an image of a wide area is formed (i.e. col. 10, lines 15 – 23).

Regarding claim 4, Lyons '911 discloses, an image data processing section for processing the central image data such that the central image is displayed in an enlarged form and processing the wide area image data such that the wide area image is displayed with less distortion (i.e. fig. 1A, image processing 222, col. 6, lines 13 – 19, col. 7, lines 27 – 45 and col. 9, lines 44 – 60).

Regarding claim 8, Lyons (i.e. col. 4, lines 1 – 19 and col. 12, lines 6 – 20) teaches the switchover between zoom and narrow angle with respect to the object, whether the object is within the field of view, which in functionality is equivalent to stand-by-mode (which is defined in specification as wide angle mode) and close observation mode (which is for focusing of object).

Regarding claims 9 and 18, Lyons (i.e. col. 4, lines 1 – 19 and col. 12, lines 6 – 20) teaches an object detecting section for detecting a specified object based on the image data captured by the image data capturing section in the stand-by mode, and wherein the control section switches the operation mode of the imaging device to the close-observation mode when the object detecting section detects the specified object.

Regarding claim 10, Lyons (i.e. fig. 8A) teaches the predetermined ending condition is satisfied in the close-observation mode.

Regarding claim 21, the limitations claimed are substantially similar to claims 1 and 8, therefore the grounds for rejecting claims 1 and 8 also applies here.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over lyons (US 6,734,911).

Regarding claim 5, Lyons teaches an imaging device to detect and track the object with computer image processing 222 so that a computational correction may be applied by the image-processing computer 222 for only the central image.

Lyons is silent to explicitly mention "memory" which can be used for storing purpose. Examiner takes Official Notice; to note that computer having a memory to serve as storage is notoriously well known in the prior art of the records.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time3 of the invention was made to implement such known teaching in the above manner.

Regarding claim 11, Lyons is silent in regards to explicitly mention, image-capturing section to generate the image data at intervals shorter in the close-observation mode than in the stand-by mode. However, in the present invention; stand-by mode is the wide-angle mode, which monitors the wide area and based on the object movement and/or entering the monitored area, the close observation mode

would be activated to aim/focus on the object in a shorter intervals. The above limitation is equivalent to the tracking system of Lyons, in witch the wide-angle camera (equivalent to stand-by mode) is used for monitoring the wide area and the narrow angle camera (equivalent to close observation camera) activated to aim/focus on the object only.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons (US 6,734,911) in view of Okada (US 6,549,682).

Regarding claim 6, Lyons as discussed earlier in the above action, teaches an imaging device with image processing 222 to detect and track the object through detecting changes in pixel value (col. 10, lines 25 – 37).

Lyons is silent in regards to explicit of, pixel position conversion patterns.

Okada in the same field, image data processing, teaches pixel position conversion patterns (i.e. figs. 7 – 8 and 11 – 12, shows different patterns, col. 1, lines 59 – 65and col. 4, lines 51 – 57) to improve the image data processing.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the image processing as taught by Lyons in accordance with the teaching of Okada to provide improvements in conversion of the number of pixels, as suggested by Okada.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons (US 6,734,911) in view of Yamamoto (US 6,430,376).

Regarding claim 7, Lyons is silent in regards to explicit of, identifying data adding

section for adding to the image data, an identifying data for identifying the image data to be stored in the memory.

Yamamoto in the same field (i.e. col. 2, lines 27 – 45 and col. 8, lines 36 – 53) teaches image ID adding section (which is equivalent to an identifying data for identifying the image data) and the memory to store the image data in accordance with the image ID.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the image processing as taught by Lyons in accordance with the teaching of Yamamoto to add image ID/identification data, which can be used for identifying and also retrieval of the stored image.

8. Claims 12 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons (US 6,734,911) in view of Fukuoka (US 6,300,976).

Regarding claim 12, Lyons is silent in regards to explicit of, communication section and communication control section for communicating with an external device and transmitting the image data to the external device.

Fukuoka in the same field (i.e. figs. 3 – 4, col. 3, lines 50 – col. 4, lines 2) teaches, communication section and communication control section for communicating with an external device and transmitting the image data to the external device.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the image processing as taught by Lyons in accordance with the teaching of Fukuoka by using a communication

interface and a detachable input/output interface for the purpose of communication and transmission of the commands or images to a remote/external device.

Regarding claim 13, the limitations, a wide angle high distortion optical system ..... and an image capturing section for capturing the image data formed by the optical system in a stand-by mode ..... and waiting for intrusion of an object and a first image data generating a central image data ....., have been addressed with respect to claim 1 above, and as for communication section for communication between the imaging device and the controller ....., please see (Fukuoka, figs. 3 – 4, computer 33 and 34, which includes a display to display the transmitted image and also is used to control the imaging device).

9. Claims 14 – 15 and 19 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons (US 6,734,911) in view of Fukuoka (US 6,300,976) further in view of Okada (US 6,549,682).

Regarding claims 14 – 15, Lyons as discussed earlier in the above action, teaches an imaging device with image processing 222 to detect and track the object through detecting changes in pixel value (col. 10, lines 25 – 37).

Lyons is silent in regards to explicit of, pixel position conversion patterns.

Okada in the same field, image data processing, teaches pixel position conversion patterns (i.e. figs. 7 – 8 and 11 – 12, shows different patterns, col. 1, lines 59 – 65and col. 4, lines 51 – 57) to improve the image data processing.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to improve the image processing as

taught by Lyons in accordance with the teaching of Okada to provide improvements in conversion of the number of pixels, as suggested by Okada.

Regarding claims 19 – 20, Lyons (i.e. fig. 8A) teaches the predetermined ending condition is satisfied in the close-observation mode, and in (col. 7, lines 20 – 26) transmitting image data to a display device/monitor.

Contact

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418.**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000,**

Or faxed to:

(571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.